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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/126,897	07/31/1998	JEAN-PIERRE WEBER	003250-198	9422
21839	7590	04/26/2004	EXAMINER	
BURNS DOANE SWECKER & MATHIS L L P POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			BURD, KEVIN MICHAEL	
			ART UNIT	PAPER NUMBER
			2631	26
DATE MAILED: 04/26/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/126,897	WEBER ET AL.
Examiner	Art Unit	
Kevin M Burd	2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 20 February 2004.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 28-45 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 28-31 and 36-45 is/are allowed.

6)  Claim(s) 32-35 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_.  
.

1. This office action, in response to the amendment filed 2/20/2004, is a non-final office action.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 32-35 have been considered but are moot in view of the new ground(s) of rejection.
3. Applicant's arguments, see response, filed 2/20/2004, with respect to claims 27-31 and 36-45 have been fully considered and are persuasive. The rejections of these claims have been withdrawn.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rakib et al (US 5,966,376) in view of Adachi et al (US 5,734,648).

Regarding claim 32, Rakib discloses a method of transmitting data over optical fiber (abstract). A signal is spread (figure 19, element 408) and then modulated (element 410) before being converted for transmission over optical fiber (column 9, lines

33-38). The process is inverted in the receiver to recover the originally transmitted signal (figure 19).

Rakib does not disclose the steps of modulating a first control digital signal comprising control information used for controlling the data (electrical signal) and for modulating a second control data signal, the second signal being different from the first using a spread spectrum method on a different one of radio frequency sub-carriers. Adachi discloses this limitation. Adachi modulates a first signal. This first signal is a control signal as shown in figure 5 and column 9, lines 33-45. A second digital control signal is modulated in primary modulator 113i. A plurality of other data signals are also modulated using different primary modulators as shown in figure 5. Each of these data signals, as well as control signal 116, are modulated, spread and combined (column 9, lines 33-45). The result of this combination is a sum signal. It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Adachi into the transmission system of Rakib to allow more data channels to be transmitted in one transmission. One of these data channels is the control channel that provides information to each data channel user or transmits needed control information to allow the data to be received by the proper receivers (column 9, lines 33-45).

Regarding claim 33, the signal prior to spreading and modulation is a baseband subscriber data signal (Rakib; column 7, lines 55-66).

Regarding claim 34, the signals are modulated using TDMA (Rakib; column 7, line 66 to column 8, line 9).

Regarding claim 35, the signals are modulated by CDMA (Rakib; figure 19 and Adachi; abstract).

***Allowable Subject Matter***

5. Claims 27-31 and 36-45 allowed.

***Contact Information***

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9314, (for formal communications intended for entry or for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Burd, whose telephone number is (703) 308-7034. The Examiner can normally be reached on Monday-Thursday from 9:00 AM - 6:00 PM.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3800.

  
\_\_\_\_\_  
Kevin M. Burd  
PATENT EXAMINER  
4/22/04